

# SCIENCE

# And Technology Program



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Do Reclamation operations provide opportunities for anadromous salmonids to spawn and rear in irrigation return flows? Do impediments in these wasteways block access to anadromous salmonid habitat? If blockages exist, what stream segments have the most inaccessible habitat?

The objectives of this study were to identify how much anadromous-salmonid habitat use exists, identify stream segments with anadromous-salmonid habitat use potential, quantify the potential habitat in each stream segment, and rank the stream segments with regard to this potential.

In two stream segments, RB4C wasteway and Red Rock Coulee, we have identified spawning and successful fry production for fall chinook. In two other stream segments, RBC wasteway and Crab Creek's mainstem, we have found redds in March; the presence of redds at this time is strong evidence that fall chinook spawning takes place in these stream segments. In only one stream segment, Red Rock Coulee, have we received any reports of steelhead: two steelhead were reported by U.S. Fish and Wildlife Service, spring of 1998. However, significant follow-up reconnaissance could not detect these fish. In addition, no evidence of steelhead spawning was observed. In addition, data collection demonstrated that substantial anadromous-salmonid habitat potential exists above impediments in Crab Creek's mainstem, Sand Hollow Creek, and RBC wasteway.

Quincy Irrigation District  
Grant County Public Utility District  
U.S. Fish and Wildlife Service (Moses Lake)  
Reclamation's Upper Columbia Area Office  
Reclamation's Ephrata Field Office

Bowen, Mark D. Assessment of anadromous-salmonid habitat in irrigation return flows of the Columbia Basin Project. 1999 Data Collection and Progress Report. Oral Presentation to Quincy Irrigation District and USBR personnel. January 28, 1999.

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